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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,758	03/24/2004	Vincent J. Zimmer	Intel/18680	4295

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EXAMINER
BONURA, TIMOTHY M

ART UNIT	PAPER NUMBER
2114	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/807,758	ZIMMER ET AL.
	Examiner	Art Unit	
	Tim Bonura	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 March 2004</u>.

2a)☐ This action is **FINAL**.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>24 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-SB/08)
Paper No(s)/Mail Date <u>5/7/04 & 8/16/04</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

- **Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by**

  Rasmussen, U.S. Patent Number 6,640,334.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Rasmussen,

U.S. Patent Number 6,640,334.

3.   Regarding claim 1:

a.   Regarding the limitation of "receiving in an operating system runtime environment

a firmware code update to be implemented in a multiprocessor system; storing the

firmware code update," Rasmussen discloses a system for receiving and executing a

flash memory shell routine for updating. (Lines 56-60 of Column 8). Rasmussen

discloses that the routine for updating can occur on communication devices on a

network (Lines 23-27 of Column 3).

b.   Regarding the limitation of "issuing an inter-processor interrupt to each processor

of the multiprocessor system; storing state information for each processor of the

multiprocessor system," Rasmussen discloses a system that temporarily suspends

ongoing processes so that a flash update can take place. The temporarily suspension

occurs without termination processes. (Lines 60-67 of Column 8).

c.   Regarding the limitation of "transitioning from the operating system runtime

environment to a pre-operating system environment," Rasmussen discloses a system

with an inactive and active page in the Flash ROM for updating the flash ROM. The

inactive page is part of a shell routine that is used for updating. (Lines 1-16 of Column

9).

4.   Regarding claim 2:

d.   Regarding the limitation of "implementing the firmware code update in the pre-

operating system environment," Rasmussen discloses a system with a firmware code

update to a Flash ROM. (Lines 46-48 of Column 3).

e.   Regarding the limitation of "reading the state information for each processor of

the multiprocessor system; restoring the state information to each processor of the

multiprocessor system, thereby transitioning from the pre-operating system environment

to the operating system runtime environment," Rasmussen discloses a system wherein

the device that was updated is rebooted without and disruption to the device

communications or the session of the user. (Lines 48-53 of Column 4).

5.   Regarding claim 3, Rasmussen discloses a system with the ability for an automatic

reboot that is quick and not interrupt general communications. (Lines 44-48 of Column 4).

Rasmussen also discloses a system with a first and second portion of the Flash ROM to store

the update to the flash memory. (Lines 5-13 of Column 4).

6.   Regarding claim 4, Rasmussen discloses a system with a check-sum for integrity

checking. (Lines 5-15 of Column 7).

7.   Regarding claim 5, Rasmussen also discloses a system with a first and second portion of the Flash ROM to store the update to the flash memory. (Lines 5-13 of Column 4).

8.   Regarding claim 6:

f.   Regarding the limitation of "receiving in an operating system runtime environment a firmware code update to be implemented in a multiprocessor system; storing the firmware code update," Rasmussen discloses a system for receiving and executing a flash memory shell routine for updating. (Lines 56-60 of Column 8). Rasmussen discloses that the routine for updating can occur on communication devices on a network (Lines 23-27 of Column 3).

g.   Regarding the limitation of "issuing an inter-processor interrupt to each processor of the multiprocessor system; storing state information for each processor of the multiprocessor system," Rasmussen discloses a system that temporarily suspends ongoing processes so that a flash update can take place. The temporarily suspension occurs without termination processes. (Lines 60-67 of Column 8).

h.   Regarding the limitation of "transitioning from the operating system runtime environment to a pre-operating system environment," Rasmussen discloses a system with an inactive and active page in the Flash ROM for updating the flash ROM. The inactive page is part of a shell routine that is used for updating. (Lines 1-16 of Column 9).

9.   Regarding claim 7:

i.   Regarding the limitation of "implementing the firmware code update in the pre-operating system environment," Rasmussen discloses a system with a firmware code update to a Flash ROM. (Lines 46-48 of Column 3).

j.   Regarding the limitation of "reading the state information for each processor of

the multiprocessor system; restoring the state information to each processor of the

multiprocessor system, thereby transitioning from the pre-operating system environment

to the operating system runtime environment," Rasmussen discloses a system wherein

the device that was updated is rebooted without and disruption to the device

communications or the session of the user. (Lines 48-53 of Column 4).

10.   Regarding claim 8, Rasmussen discloses a system with the ability for an automatic

reboot that is quick and not interrupt general communications. (Lines 44-48 of Column 4).

Rasmussen also discloses a system with a first and second portion of the Flash ROM to store

the update to the flash memory. (Lines 5-13 of Column 4).

11.   Regarding claim 9, Rasmussen discloses a system with a check-sum for integrity

checking. (Lines 5-15 of Column 7).

12.   Regarding claim 10, Rasmussen also discloses a system with a first and second portion

of the Flash ROM to store the update to the flash memory. (Lines 5-13 of Column 4).

13.   Regarding claim 11:

k.   Regarding the limitation of "receiving in an operating system runtime environment

a firmware code update to be implemented in a multiprocessor system; storing the

firmware code update," Rasmussen discloses a system for receiving and executing a

flash memory shell routine for updating. (Lines 56-60 of Column 8). Rasmussen

discloses that the routine for updating can occur on communication devices on a

network (Lines 23-27 of Column 3).

l.   Regarding the limitation of "issuing an inter-processor interrupt to each processor

of the multiprocessor system; storing state information for each processor of the

multiprocessor system," Rasmussen discloses a system that temporarily suspends

ongoing processes so that a flash update can take place. The temporarily suspension

occurs without termination processes. (Lines 60-67 of Column 8).

m.   Regarding the limitation of "transitioning from the operating system runtime

environment to a pre-operating system environment," Rasmussen discloses a system

with an inactive and active page in the Flash ROM for updating the flash ROM. The

inactive page is part of a shell routine that is used for updating. (Lines 1-16 of Column

9).

n.   Regarding the limitation of "implementing the firmware code update in the pre-

operating system environment," Rasmussen discloses a system with a firmware code

update to a Flash ROM. (Lines 46-48 of Column 3).

o.   Regarding the limitation of "reading the state information for each processor of

the multiprocessor system; restoring the state information to each processor of the

multiprocessor system, thereby transitioning from the pre-operating system environment

to the operating system runtime environment," Rasmussen discloses a system wherein

the device that was updated is rebooted without and disruption to the device

communications or the session of the user. (Lines 48-53 of Column 4).

p.   Regarding the limitation of "determining if a warm start has been requested,"

Rasmussen discloses a system with the ability for an automatic reboot that is quick and

not interrupt general communications. (Lines 44-48 of Column 4).

q.   Regarding the limitation of "reading the firmware code update from the first

defined storage location," Rasmussen also discloses a system with a first and second

portion of the Flash ROM to store the update to the flash memory. (Lines 5-13 of

Column 4).

14.   Regarding claim 12, Rasmussen discloses a system wherein the transition between

shell routine state and operation state is a reboot. (Lines 44-48 of Column 4).

15.   Regarding claim 13, Rasmussen discloses a system with a check-sum for integrity

checking. (Lines 5-15 of Column 7).

16.   Regarding claim 14, Rasmussen discloses a system that downloads the updates from a

network. (Lines 35-45 of Column 3).

17.   Regarding claim 15, Rasmussen also discloses a system with a first and second portion

of the Flash ROM to store the update to the flash memory. (Lines 5-13 of Column 4).

18.   Regarding claim 16:

r.   Regarding the limitation of "receiving in an operating system runtime environment

a firmware code update to be implemented in a multiprocessor system; storing the

firmware code update," Rasmussen discloses a system for receiving and executing a

flash memory shell routine for updating. (Lines 56-60 of Column 8). Rasmussen

discloses that the routine for updating can occur on communication devices on a

network (Lines 23-27 of Column 3).

s.   Regarding the limitation of "issuing an inter-processor interrupt to each processor

of the multiprocessor system; storing state information for each processor of the

multiprocessor system," Rasmussen discloses a system that temporarily suspends

ongoing processes so that a flash update can take place. The temporarily suspension

occurs without termination processes. (Lines 60-67 of Column 8).

t.   Regarding the limitation of "transitioning from the operating system runtime

environment to a pre-operating system environment," Rasmussen discloses a system

with an inactive and active page in the Flash ROM for updating the flash ROM. The

inactive page is part of a shell routine that is used for updating. (Lines 1-16 of Column
9).

u.   Regarding the limitation of "implementing the firmware code update in the pre-
operating system environment," Rasmussen discloses a system with a firmware code
update to a Flash ROM. (Lines 46-48 of Column 3).

v.   Regarding the limitation of "reading the state information for each processor of
the multiprocessor system; restoring the state information to each processor of the
multiprocessor system, thereby transitioning from the pre-operating system environment
to the operating system runtime environment," Rasmussen discloses a system wherein
the device that was updated is rebooted without and disruption to the device
communications or the session of the user. (Lines 48-53 of Column 4).

w.   Regarding the limitation of "determining if a warm start has been requested,"
Rasmussen discloses a system with the ability for an automatic reboot that is quick and
not interrupt general communications. (Lines 44-48 of Column 4).

x.   Regarding the limitation of "reading the firmware code update from the first
defined storage location," Rasmussen also discloses a system with a first and second
portion of the Flash ROM to store the update to the flash memory. (Lines 5-13 of
Column 4).

19.   Regarding claim 17, Rasmussen discloses a system wherein the transition between
shell routine state and operation state is a reboot. (Lines 44-48 of Column 4).

20.   Regarding claim 18, Rasmussen discloses a system with a check-sum for integrity
checking. (Lines 5-15 of Column 7).

21.   Regarding claim 19, Rasmussen discloses a system that downloads the updates from a
network. (Lines 35-45 of Column 3).

22.   Regarding claim 20, Rasmussen also discloses a system with a first and second portion

of the Flash ROM to store the update to the flash memory. (Lines 5-13 of Column 4).

Specification

23.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Conclusion

24.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to **Tim Bonura.**

> o   The examiner can normally be reached on **Mon-Fri: 8:30-5:00**.

> o   The examiner can be reached at: **571-272-3654**.

25.   If attempts to reach the examiner by telephone are unsuccessful, please contact the

examiner's supervisor, **Scott Baderman.**

> o   The supervisor can be reached on **571-272-3644.**

26.   The fax phone numbers for the organization where this application or proceeding is

assigned are:

> o   **703-872-9306 for all patent related correspondence by FAX.**

27.   Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov/. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

28.   Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the **receptionist** whose telephone number is: **571-272-2100.**

29.   Responses should be mailed to:

> o   **Commissioner of Patents and Trademarks**
>
> **P.O. Box 1450**
>
> **Alexandria, VA 22313-1450**

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Tim Bonura
Examiner
Art Unit 2114

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January 3, 2007